

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 4, 13, 14, 17 and 18 are pending in the application, with claim 4 being the independent claim. New claims 17 and 18 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Description of the Invention

Claim 4, as amended, is directed to a composition comprising the carboxamide (1-1), *N*-(3',4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxamide and at least one triazole selected from the group consisting of propiconazole, epoxiconazole, prothioconazole, tebuconazole, and bitertanol, in a ratio of 20:1 to 1:20 of carboxamide to triazole.

Rejections under 35 U.S.C. § 103

Claim 4 has been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over DE 102 15 292 to Dunkel *et al.* ("Dunkel"). Applicants respectfully traverse the rejection of claim 4.

A. Prima Facie Case of Obviousness Has Not Been Established

Dunkel discloses pyrazolyl carboxamide derivatives useful as fungicides and bactericides for the protection of plants. Dunkel discloses the carboxamide 1-1, but only

generally discloses combinations of carboxamide 1-1 with other mixing components such as known fungicides, bactericides, acaricides, nematocides or insecticides. Canadian equivalent of Dunkel, CA 2476462 A1, p. 26, lines 19-20. Dunkel recites several thousand possible combinations of the carboxamide 1-1 with other mixing components. However, Dunkel does not disclose any particular combinations of carboxamide 1-1 with other active compounds. Dunkel also does not disclose or provide a reason to combine the claimed fungicidal mixing partners with a carboxamide compound of formula 1-1.

However, according to the Examiner,

Dunkel et. al. teaches that N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide is an effective agent for protecting crops from many different microorganisms, and that N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide can be mixed together with other fungicidal agents such as propiconazole, epoxiconazole, prothioconazole, tebuconazole, and bitertanol to provide a synergistic effect. As such, it would have been *prima facie* obvious to one of ordinary skill in the art, at the time of the invention, to combine N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide with the claimed triazoles to obtain a synergistic composition to protect crops from pests, fungi, and many other microorganisms.

(Office Action, p. 6). The Examiner further claims that "it would have been considered routine for one of ordinary skill in the art to determine optimum weight ratio ranges of N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide to triazole compounds for an enhanced pesticidal and fungicidal effect." Office Action, p. 7. Applicants respectfully disagree and submit that the

Examiner is using impermissible hindsight and has reconstructed the claimed invention based solely on the Applicant's disclosures.

Dunkel does not provide a person of ordinary skill in the art any reason to select the specifically claimed triazole compounds to combine with the carboxamide 1-1. In fact, the Examiner admits that "Dunkel et. al. does not explicitly teach that N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide is combined with the claimed triazole compounds ..." Office Action, p. 6-7. Therefore, one skilled in the art would not have found propiconazole, epoxiconazole, prothioconazole, tebuconazole, and bitertanol by picking and choosing from Dunkel's laundry list of secondary mixing partners, and one skilled in the art would not have had an expectation of synergistic effect in the presently claimed combinations.

Applicants are aware of the flexible approach for establishing obviousness set out in *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007). However, as cautioned by Judge Rader in a post-KSR decision in *In re Kubin*, 561 F.3d 1351 (Fed. Cir. 2009), "where a defendant merely throws metaphorical darts at a board filled with combinatorial prior art possibilities, courts should not succumb to hindsight claims of obviousness." (561 F.3d at 1359.) Applicants submit that in rendering the rejection, the Examiner is improperly picking and choosing the claimed compounds from among the thousands of combinations disclosed by Dunkel.

As demonstrated by the data in the captioned specification, carboxamide 1-1, when combined with the claimed fungicides, greatly enhances the fungicidal effect of carboxamide 1-1. Such a synergy between carboxamide 1-1 and claimed fungicides

would not have been expected or obtained "through routine experimentation" of Dunkel's combinations.

B. Synergistic Effect

Even assuming that a *prima facie* case of obviousness has been established, which it has not, the synergistic effect exhibited by the claimed combination is sufficient to overcome any *prima facie* case of obviousness.

As detailed in Applicants' Reply dated March 13, 2009, the data on pages 79, 80 and 83-88 of the specification show that the claimed combinations have a synergistic fungicidal effect when applied to different crop plants. For example, in Example A on page 79 of the specification, a combination of compounds 1-1 and 3-17 (tebuconazole) is applied to young plants treated with a conidia suspension of *Pyrenophora teres*. The efficacy of control of infection using compound 1-1 alone or compound 3-15 alone are 43% and 29%, respectively. However, the efficacy of the combination, 71%, is much greater than the combined efficacy of each individual component, and the efficacy calculated using the Colby formula. Similar synergistic results for combinations of compound 1-1 with claimed azole compounds are demonstrated in Examples A and D-F on pages 79 and 83-88 of the specification.

Accordingly, for at least the reasons discussed above, claim 4 is not *prima facie* obvious over Dunkel. Reconsideration and withdrawal of the rejection of claim 4 under 35 U.S.C. § 103(a) is respectfully requested.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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